

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Y. KIYOTOKI et al

Serial No.

Filed: February 27, 2002

For: JOINT CONSTRUCTION OF COBALT-BASED ALLOY

PRELIMINARY AMENDMENT

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to the examination thereof, please amend the above-identified application as follows.

IN THE CLAIMS

Please rewrite claims 3-6 and 10-13 as set forth below.

3. (Amended) The joint construction of cobalt-based alloy according to claim 1, wherein said insert metal layer contains an element diffused from said base metal portion and cobalt diffused from said cobalt-based alloy portion.

4. (Amended) The joint construction of cobalt-based alloy material according to claim 1, wherein the grain size of said eutectic carbide is not larger than 30  $\mu\text{m}$ .

5. (Amended) The joint construction of cobalt-based alloy material according to claim 1, wherein said base metal portion is formed of any of carbon steel, low alloy steel, and stainless steel.

6. (Amended) The joint construction of cobalt-based alloy material according to claim 1, wherein said cobalt-based alloy portion contains 0.6 to 3% C, 2% or less Si, 25 to 32% Cr, 15% or less W, 0 to 3% Fe, 0 to 3% Ni, and 0 to 6% Mo by weight, the balance being Co and unavoidable impurities.

10. (Amended) The valve according to claim 8, wherein said insert metal layer contains an element diffused from said body portion and cobalt diffused from said cobalt-based alloy portion.

11. (Amended) The valve according to claim 8, wherein the grain size of said eutectic carbide is not larger than 30  $\mu\text{m}$ .

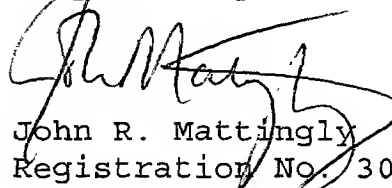
12. (Amended) The valve according to claim 8, wherein said body portion is formed of carbon steel, low alloy steel, or stainless steel.

13. (Amended) The valve according to claim 8, wherein said cobalt-based alloy material portion contains 0.6 to 3% C, 2% or less Si, 25 to 32% Cr, 15% or less W, 0 to 3% Fe, 0 to 3% Ni, and 0 to 6% Mo by weight, the balance being Co and unavoidable impurities.

REMARKS

Claims 3-6 and 10-13 have been amended to remove multiple dependencies. Examination is respectfully requested.

Respectfully submitted,



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## MARKED UP VERSION OF REWRITTEN CLAIMS

3. (Amended) The joint construction of cobalt-based alloy according to claim 1 [or 2], wherein said insert metal layer contains an element diffused from said base metal portion and cobalt diffused from said cobalt-based alloy portion.

4. (Amended) The joint construction of cobalt-based alloy material according to [any one of claims] claim 1 [to 3], wherein the grain size of said eutectic carbide is not larger than 30  $\mu\text{m}$ .

5. (Amended) The joint construction of cobalt-based alloy material according to [any one of claims] claim 1 [to 4], wherein said base metal portion is formed of any of carbon steel, low alloy steel, and stainless steel.

6. (Amended) The joint construction of cobalt-based alloy material according to [any one of claims] claim 1 [to 5], wherein said cobalt-based alloy portion contains 0.6 to 3% C, 2% or less Si, 25 to 32% Cr, 15% or less W, 0 to 3% Fe, 0

to 3% Ni, and 0 to 6% Mo by weight, the balance being Co and unavoidable impurities.

10. (Amended) The valve according to claim 8 [or 9], wherein said insert metal layer contains an element diffused from said body portion and cobalt diffused from said cobalt-based alloy portion.

11. (Amended) The valve according to [any one of claims] claim 8 [to 10], wherein the grain size of said eutectic carbide is not larger than 30  $\mu\text{m}$ .

12. (Amended) The valve according to [any one of claims] claim 8 [to 11], wherein said body portion is formed of carbon steel, low alloy steel, or stainless steel.

13. (Amended) The valve according to [any one of claims] claim 8 [to 12], wherein said cobalt-based alloy material portion contains 0.6 to 3% C, 2% or less Si, 25 to 32% Cr, 15% or less W, 0 to 3% Fe, 0 to 3% Ni, and 0 to 6% Mo by weight, the balance being Co and unavoidable impurities.